**PENNSYLVANIA**

**PUBLIC UTILITY COMMISSION**

**Harrisburg, PA 17105-3265**

 Public Meeting held April 22, 2010

Commissioners Present:

 James H. Cawley, Chairman

 Tyrone J. Christy, Vice Chairman, Dissent

 Wayne E. Gardner, Statement

 Robert F. Powelson

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| Petition of PECO Energy Company for Approval of Smart Meter Technology Procurement and Installation Plan | Docket No. M-2009-2123944 |

**OPINION AND ORDER**

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**BY THE COMMISSION:**

# I. Introduction

Before the Pennsylvania Public Utility Commission (Commission) for consideration and disposition are the Initial Decision (I.D.) issued by Administrative Law Judge (ALJ) Marlane R. Chestnut on January 28, 2010, and the Exceptions of the Office of Consumer Advocate (OCA) filed with respect thereto on February17, 2010. Replies to Exceptions were filed on March 1, 2010, by the PECO Energy Company (PECO), the Office of Small Business Advocate (OSBA) and the Philadelphia Area Industrial Users Group[[1]](#footnote-1) (PAIEUG).

Included in the Initial Decision is a recommendation for the Commission to approve, without modification, the Joint Petition for Partial Settlement (Settlement Petition) filed by PECO, the OCA, the OSBA, the Department of Environmental Protection (DEP), the Clean Air Council (CAC), Constellation NewEnergy, Inc. and the Constellation New Energy Commodities Group, Inc. (Constellation), and the Association of Community Associations for Reform Now (ACORN). Consistent with the Settlement Petition, the Initial Decision recommended that PECO’s Smart Meter Technology Procurement and Installation Plan (Plan) be approved as amended by the Settlement Petition. The Initial Decision also contained recommendations on two issues not resolved by the Settlement Petition.

# II. Background

## A. Act 129

Governor Edward Rendell signed Act 129 of 2008 (“the Act” or “Act 129”) into law on October 15, 2008. The Act took effect thirty days thereafter on November 14, 2008. Among other things, the Act specifically directed that electric distribution companies (“EDCs”) with at least 100,000 customers file, with the Commission for approval, a smart meter technology procurement and installation plan. 66 Pa. C.S. § 2807(f)(1). These plans were to be filed by August 14, 2009. Each plan must describe the smart meter technologies the EDC proposes to install, upon request from a customer at the customer’s expense, in new construction, and in accordance with a depreciation schedule not to exceed 15 years. 66 Pa. C.S. §§ 2807(f)(1) and (2). The Act also establishes a requirement for EDCs to make available to third parties, upon customer consent, direct meter access and electronic access to meter data. 66 Pa. C.S. § 2807(f)(3). The Act further defines minimum smart meter technology capabilities. 66 Pa. C.S. § 2807(g). Finally, the Act establishes acceptable cost recovery methods. 66 Pa. C.S. § 2807(7).

On March 30, 2009, the Commission issued a Secretarial Letter seeking comments on a draft staff proposal and additional questions regarding EDC smart meter procurement and installation. On June 24, 2009, the Commission outlined the standards each smart meter plan must meet and provided guidance on the procedures to be followed for submittal, review and approval of all aspects of each smart meter plan. *Smart Meter Procurement and Installation*, Docket No. M-2009-2092655 (*Implementation Order*).

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## B. The Company

PECO provides electric delivery service to approximately 1.6 million customers and natural gas delivery service to approximately 475,000 customers in Southeastern Pennsylvania. PECO is a Pennsylvania corporation with its principal offices in Philadelphia, Pennsylvania.

# III. Procedural History

On August 14, 2009, PECO filed with the Commission its “Petition of PECO Energy Company for Approval of its Smart Meter Technology Procurement and Installation Plan” (Plan Petition). The Plan Petition requested that the Commission approve the Plan in accordance with 66 Pa. C.S. § 2807(f)(1). Specifically, the Plan Petition requests the Commission to:

(1) find that the Plan satisfies the requirements of 66 Pa. C.S. § 2807(f)(1)–(f)(3) and the *Implementation Order*;

(2) approve the deployment of up to 600,000 smart meters by PECO;

(3) approve the tariff provisions and cost recovery mechanism pursuant to 66 Pa. C.S. § 1307 to recover the costs incurred by PECO in the implementation and operation of its Plan; and

(4) approve the proposed incremental charges for installation of individual smart meters in advance of system-wide deployment pursuant to 66 Pa. C.S. § 2807(f)(2)(i).

Included with the Petition were PECO’s direct testimony, associated exhibits, the Plan and an Appendix to the Plan. The Petition was served on the Commission’s Office of Trial Staff (OTS), the OCA, the OSBA, licensed electric generation suppliers and other interested entities.

A Notice of Appearance was filed on August 20, 2009, by the OTS. On September 1, 2009, the OCA filed a Notice of Intervention and Public Statement. A Notice of Intervention, Public Statement, and Notice of Appearance were filed on September 25, 2009, by the OSBA.

A notice of the filing was published in the *Pennsylvania Bulletin* on August 29, 2009, at 39 *Pa.B.* 5218. Notice to the public also was provided through published notices in all major newspapers serving PECO’s service territory, issuance of a press release to all major media in the service territory and the posting of the entire filing on the company’s website. I.D. at 2.

Petitions to Intervene were filed by PAIEUG on September 10, 2009, the DEP on September 18, 2009, CAC on September 23, 2009, Constellation on September 25, 2009, and ACORN on September 25, 2009.

On September 25, 2009, Comments were filed by the OCA, the OTS, the DEP and ACORN.

A prehearing conference was held in Harrisburg on September 29, 2009. Present and participating through Counsel were PECO, ACORN, Constellation, the DEP, the OCA, the OSBA, the OTS, and PAIEUG.

On October 6, 2009, PECO filed and served revised PECO Exh. 1,which contained revisions to the Plan.

The technical conference required by the *Implementation Order* was held in Harrisburg on October 7, 2009, under the direction of Administrative Law Judge David A. Salapa. Participants included PECO, the OTS, the OCA, the OSBA, the DEP, ACORN and CAC. Three witnesses were presented by PECO for questioning by the Parties.

A hearing was held in Harrisburg on November 13, 2009. All parties other than CAC were present and participated through counsel. PECO’s filing (Vols. I and II, including the Plan as revised on October 6, 2009) was admitted into the record as PECO Exh. 1 and an affidavit of PECO witness Adams (including attachments) was admitted into the record as PECO Exh. 2. Upon the presentation of affidavits regarding the adoption of their respective statements and exhibits, admitted into the record without cross-examination were the statements and exhibits of PECO, the OTS, Constellation, the OCA, ACORN, the OSBA, and PAIEUG.

On November 25, 2009, the Settlement Petition was filed by PECO, the OCA, the OSBA, Constellation, the DEP, CAC and ACORN. Statements in support of the Settlement Petition were submitted by each of the settling parties. The OTS and PAIEUG submitted statements of non-opposition. Settlement Petition, Attachments A-K. As discussed, *infra*, the Settlement Petition proposes to resolve all of the issues addressed in this proceeding, except: (1) how to allocate the costs to implement the Plan, other than those of the smart meters themselves (common costs); and (2) whether costs allocated to small commercial and industrial customers should be recovered on a kWh or customer charge basis. Settlement Petition at 7-8.

Main Briefs addressing the two outstanding issues, cited *supra*, were filed on December 2, 2009, by PECO, the OCA, the OSBA and PAIEUG. All four parties filed Reply Briefs on December 9, 2009. The record was closed on December 9, 2009.

On January 28, 2010, the ALJ issued her Initial Decision which recommended, *inter alia*, that the Settlement Petition be approved. As discussed, *infra*, the ALJ recommended that common costs be allocated based on the number of customers in each customer class, as proposed by PECO in its Plan. With that recommendation, the ALJ found that the allocation of costs to the small commercial and industrial class is resolved.

On February 17, 2009, the OCA filed Exceptions to the Initial Decision. Replies to the OCA’s Exceptions were filed on March 1, 2010 by PECO, the OSBA, and PAIEUG.

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# IV. Description of the Plan

PECO’s Plan includes the design, procurement, deployment and operation of inter-related smart meter systems. PECO proposes to implement its Plan in two phases. Phase One will focus on the selection of the smart meter technology to be deployed, the implementation of a data management system and other information technology investments, the testing and validation of the Smart Meter technology and the deployment of the advanced metering infrastructure communications network. The first phase also involves the deployment of smart meters in controlled quantities and a program to test dynamic pricing and customer acceptance. Phase One began in the third quarter of 2009 and is projected to run through the third quarter of 2012. Phase Two will complete the deployment of smart meters across the service territory and is expected to begin in the fourth quarter of 2012. PECO Exh. 1, Revised Plan Volume 2 at 1-2 and Appendix 1.

PECO projected the costs to implement Phase One to be approximately $215 million if it were to install 100,000 smart meters during this phase. PECO states that these costs may vary between $125 million and $225 million depending on actual meter, equipment, installation and IT development costs. Stranded costs add another $6 million for a projected total of $221 million. PECO Exh. 1, Revised Plan Volume 2 at 34 and 36.

In August 2009, PECO filed an application for assistance with the U.S. Department of Energy (DOE) under its Smart Grid Investment Grant Program for $200 million in matching federal funds. By letter dated October 27, 2009, the DOE notified PECO that its application had been selected for award negotiations. If PECO receives the full award, PECO will expand the initial deployment of smart meters from 100,000 meters to 600,000 meters. PECO Exh. 2. The net effect of the federal grant and the increased costs associated with deploying an additional 500,000 smart meters and additional stranded costs would reduce the projected Phase One total costs from $221 million to $193 million. As indicated *supra*, the actual cost may vary from PECO’s projections. PECO Exh. 1, Revised Plan Volume 2 at 34, 38-39.

PECO proposes to implement its Smart Meter Plan through three major filings with the Commission. Through the instant filing, PECO seeks to establish its Smart Meter Plan and receive approval of its Smart Meter technology procurement process. Second, in June 2010, PECO plans to file an initial dynamic pricing and customer acceptance program. Third, in 2012, PECO will file a universal meter deployment plan for its remaining customers. PECO Exh. 1 at 2.

Pursuant to 66 Pa. C.S. § 2807(f)(7), PECO has elected to establish a non-bypassable Smart Meter Cost Recovery Rider under 66 Pa. C.S. § 1307 to recover the costs of the Plan.

# V. Discussion

In Commission proceedings, the proponent of a rule or order bears the burden of proof. 66 Pa. C.S. § 332(a). To satisfy that burden, the proponent of a rule or order must prove each element of its case by a preponderance of the evidence. *Samuel J. Lansberry, Inc. v. Pa. PUC*, 578 A.2d 600 (Pa. Cmwlth. 1990). A preponderance of the evidence is established by presenting evidence that is more convincing, by even the smallest amount, than that presented by the other parties to the case. *Se-Ling Hosiery v. Margulies*, 364 Pa. 45, 70 A.2d 854 (1950). Additionally, this Commission’s decision must be supported by substantial evidence in the record. More is required than a mere trace of evidence or a suspicion of the existence of a fact sought to be established. *Norfolk & Western Ry. Co. v. Pa. PUC,* 489 Pa. 109, 413 A.2d 1037 (1980).

We note that any issue that we do not specifically address herein has been duly considered and will be denied without further discussion. It is well settled that we are not required to consider expressly or at length each contention or argument raised by the Parties. [Consolidated Rail Corporation v. Pa. PUC, 625 A.2d 741 (Pa. Cmwlth. 1993);](file://C:\research\buttonTFLink?_m=69761b6202cb4178e2a6e6fe02f5751b&_xfercite=%3ccite%20cc=%22USA%22%3e%3c!%5bCDATA%5b2000%20Pa.%20PUC%20LEXIS%2067%20%5d%5d%3e%3c\cite%3e&_butType=3&_butStat=242&_butNum=5&_butInline=1&_butinfo=%3ccite%20cc=%22USA%22%3e%3c!%5bCDATA%5b625%20A.2d%20741%5d%5d%3e%3c\cite%3e&_fmtstr=FULL&docnum=5&_startdoc=1&_startchk=1&wchp=dGLSzS-lSlbz&_md5=ad2b02d95c2a9216e83b92a3570d4785) see also, generally, [University of Pennsyl­vania v. Pa. PUC, 485 A.2d 1217 (Pa. Cmwlth. 1984).](file://C:\research\buttonTFLink?_m=69761b6202cb4178e2a6e6fe02f5751b&_xfercite=%3ccite%20cc=%22USA%22%3e%3c!%5bCDATA%5b2000%20Pa.%20PUC%20LEXIS%2067%20%5d%5d%3e%3c\cite%3e&_butType=3&_butStat=242&_butNum=6&_butInline=1&_butinfo=%3ccite%20cc=%22USA%22%3e%3c!%5bCDATA%5b485%20A.2d%201217%5d%5d%3e%3c\cite%3e&_fmtstr=FULL&docnum=5&_startdoc=1&_startchk=1&wchp=dGLSzS-lSlbz&_md5=9b1cc8319afd12440738bb82d74455ef)

## A. Joint Petition for Partial Settlement

As discussed, *supra,* a Settlement Petition was filed by PECO, the OCA, the OSBA, Constellation, the DEP, CAC and ACORN. Pursuant to our Regulations at 52 Pa. Code § 5.231, it is the Commission’s policy to promote settlements. However, the Commission must review proposed settlements to determine whether the terms are in the public interest. *Pa. PUC v. Philadelphia Gas Works*, Docket No. M-00031768 (January 7, 2004); 52 Pa. Code § 69.1201.

### 1. Stakeholder Process

In the direct testimony filed with PECO’s Plan Petition, PECO stated that it would initiate a collaborative process with interested statutory advocates, government entities, meter technology providers and other stakeholders to design an initial dynamic pricing and customer acceptance process. PECO St. No. 1 at 7.

The proposed Settlement Petition provides more specificity with regard to the issues that will be addressed, the scheduling of meetings, and the resolution of unresolved issues. The Settlement Petition provides that PECO will meet with stakeholders in December 2009, January 2010, February 2010 and no less than two times per year through December 2012. The stakeholder meetings will address, at the minimum, eight specific subject areas delineated in the Settlement Petition. Any unresolved issues will be presented to the Commission in conjunction with either PECO’s June 2010 filing regarding Dynamic Pricing and Customer Acceptance Testing or PECO’s 2012 filing regarding Universal Deployment. Settlement Petition at 4-5.

In support of these amendments, the OCA stated that “This increased specificity will allow for a robust process, encourage a two-way dialogue and allow for a better-informed process for both stakeholders and the company.” The OCA also submitted that these goals were achieved in the stakeholder process associated with PECO’s EE&C Plan and that the smart metering stakeholder process “will build on this success.” OCA Statement of Support of the Settlement Petition at 3-4.

In its Statement of Support, the DEP pointed out that much work still needs to be done on PECO’s Plan and the proposed collaborative process adds an important layer of transparent participation to the future development of the Plan. DEP Statement of Support of Settlement Petition at 5.

ACORN submitted that the proposed stakeholder meetings will provide a forum to discuss how to design both dynamic pricing schemes that will not disadvantage low income customers and marketing programs targeted to low income customers. ACORN Statement of Support of the Settlement Petition at 2.

We agree with the OCA, DEP and ACORN, that a more definitive and robust collaborative between PECO and the various stakeholders can only add to the effectiveness and efficiency of the Plan. In addition, the incorporation of any unresolved issues in the two forthcoming smart metering proceedings should enhance the likelihood that these issues will be resolved in a timely manner. As part of PECO’s June 2010 filing regarding Dynamic Pricing and Customer Acceptance Testing, PECO should also address how it intends to recover the default service costs of its dynamic pricing option, including customer education on its dynamic pricing services.

### 2. Customer Research and Education

The Settlement Petition states that PECO plans to address the need for any additional customer research and education on the deployment of Smart Meters as part of its implementation plan to be filed in June 2010. Settlement Petition at 6.

ACORN averred that the implementation of smart metering is going to be confusing for many residential customers because the kinds of service are quite different from traditional service offered in the past. ACORN submitted that low income households tend to have lower education levels and its seems reasonable to expect they may have greater difficulty understanding how smart meters, dynamic pricing and real time pricing will work. ACORN stated that to the extent that the Settlement Petition expresses PECO’s intention to remain open to providing additional education, then the Settlement Petition is in the Public Interest. ACORN Statement of Support of the Settlement Petition at 2.

To maximize the potential success of the program, it is very important that PECO’s customers are fully aware of the characteristics and potential benefits of the forthcoming smart metering opportunities. To that end, we believe that further research and consideration into customer education prior to the June 2010 filing can only enhance the success of the program.

### 3. Remote Connect/Disconnect

In our investigation into Electric Distribution Company (EDC) Smart Meter Procurement and Installation at Docket No. M-2009-2092655, we addressed the issues related to the capability of smart meters to remotely disconnect and reconnect service. *Implementation Order* at 17-18. In our *Implementation Order* we stated:

The policy issues and procedures regarding termination and reconnection of service are addressed in the Public Utility Code (“Code”), at 66 Pa.C.S. §§ 1401‑1418 and this Commission’s regulations. Requiring the ability to remotely disconnect and reconnect service in no way abrogates an EDC’s obligation to adhere to the Code or this Commission’s regulations. Therefore, the Commission will require that smart meters have a capability to remotely disconnect and reconnect service as it provides the ability to increase safety, efficiency and cost benefits.

*Implementation Order* at 18.

In its testimony in the instant proceeding, the OCA expressed its concern that PECO has not developed the proper protocols for the implementation of the disconnect/reconnect functionality. The OCA explained, that currently, to achieve a disconnection, PECO must send a trained technician to the customer’s property to, *inter alia*, prevent any inadvertent disconnection to properties that are occupied or to prevent harm that may result from a voluntary disconnect in the case of a multi-family building. OCA St. No. 1S at 4.

The Settlement Petition provides that PECO will comply with Chapter 14 of the Public Utility Code (Code), 66 Pa. C.S. § 1401, *et seq*. and Chapter 56 of the Commission’s Regulations, 52 Pa. Code § 56.91, *et seq*., with respect to the application of the remote connect/disconnect capability for the termination of service. PECO will also, at the minimum: (1) send an appropriately trained employee to make contact with a responsible adult; (2) where personal contact is not made, provide a notice containing specific information relating to PECO’s programs and payment information; and (3) stop termination if the customer can show specific confirmation of payment. PECO agrees to charge a reduced restoration fee where the remote feature is utilized and that restoration timeframe improvements will be considered as part of the collaborative process. Settlement Petition at 7.

The OCA stated that the Settlement Petition addresses its concern relative to the use of the remote connect/disconnect feature and hopes the collaborative process will address the necessary protocols. OCA Statement of Support of the Settlement Petition at 4.

As indicated by the ALJ, the protocols contained in the Settlement Petition will ensure that customers are not adversely affected by the use of the remote connect/disconnect feature. The Settlement Petition makes it clear that all consumer protections provided by statute or the Commission’s regulations will be maintained or enhanced, and that PECO staff will be appropriately trained. I.D. at 22. We concur with the ALJ and look to the collaborative process to continue to develop the necessary protocols to ensure that remote shutoffs and reconnections are implemented with proper safeguards and procedures.

### 4. Return on Equity

Act 129 allows EDCs to recover “all reasonable and prudent costs of providing smart meter technology” including, *inter alia*, the capital costs over the useful life of any equipment and facilities that may be needed to implement the smart meter plan. 66 Pa. C.S. § 2807(f)(7). In the *Implementation Order*, the Commission stated that the costs to be recovered by EDCs shall include a return component based on the EDC’s weighted cost of capital. *Implementation Order* at 29.

The Settlement Petition provides that the return on rate base component of the initial Smart Meter Surcharge will be calculated using PECO’s actual capital structure reported in the most recent quarterly earnings report filed with the Commission. Settlement Petition at 7. In its Plan Petition, PECO had initially proposed a return on equity of 11.5%. PECO Exh. ABC-2 at 1g. The Settlement Petition provides that the return on equity (ROE) will initially be set at 10.5% and the cost of debt and preferred stock will be based on actual rates presented in PECO’s quarterly earnings report to the Commission. Under the Settlement Petition, the ROE would be adjusted to reflect the ROE allowed by the Commission in a base rate case that shall be effective within one year of the initial Smart Meter Surcharge[[2]](#footnote-2). The ROE would then be adjusted back to the initial implementation of the Smart Meter Surcharge. Settlement Petition at 7.

In its direct testimony, the OCA initially recommended, *inter alia,* that in situations where more than three years have elapsed since the Commission has approved an equity return in a fully-litigated rate proceeding, the equity return used for determining the Smart Meter Cost Recovery Charge (SMCRC) should be based on the most recent “Report on the Quarterly Earnings of Jurisdictional Utilities” (Quarterly Earnings Report) prepared by the Commission’s Bureau of Fixed Utility Services (FUS). OCA St. No. 2 at 5. The OCA noted that it has been almost twenty years since PECO’s last electric base rate case. *Id*. at 7. The OCA and the OTS reported that after the Commission approved the use of Distribution System Improvement Charges (DSICs) by water utilities, FUS began developing and publishing a return on equity explicitly for use in determining DSIC returns. OCA Exh. No. 1 at 6; OTS St. No. 1 at 14. The OCA recommended that the Commission direct FUS to begin publishing a return on equity specifically applicable for SMCRC. OCA St. No. 1 at 6. The OTS also recommended using a rate of return from the FUS Quarterly Earnings Report which is based on the Commission’s established barometer group. OTS St. No. 1 at 14.

We concur with the terms of the Settlement Petition to the extent that it creates an interim return on equity of 10.5% that will be replaced retroactively with the actual return approved by the Commission in PECO’s next base rate proceeding. However, if at any time in the future, PECO’s last litigated case is more than three years old, the quarterly rate of return for the electric utility barometer group from theReport on Quarterly Earnings of Jurisdictional Utilities prepared by the Commission’s Bureau of Fixed Utility Services shall be used until a rate of return is determined in a subsequent litigated case, to be effective for the subsequent three-year period.

In the event that the parties to a PECO base rate case reach a proposed settlement, we shall direct the parties to establish a ROE for the purpose of the SMCRC mechanism as part of that proceeding.

### 5. Cost Allocation

PECO has proposed to aggregate the individual rate classes into three general rate groups for the purpose of allocating smart meter costs. The “Residential” group includes Rates R, RH and OP; the “Small C&I” consists of Rate GS; and “Large C&I” includes Rates HT, PD and EP. PECO Exh. ABC-3.

**a. Direct Meter Costs**

All of the Parties agreed that the costs to procure and install the smart meters (direct meter costs) can be identified by customer class. PECO MB at 3. Consequently, the Settlement Petition provides that the direct meter costs shall be directly assigned to the individual classes of service. Settlement Petition at 7. We believe that this allocation of direct meter costs is appropriate and should be adopted.

b. Common Costs

The allocation ofthe costs to implement the Plan, other than the direct meter costs, was not resolved in the Settlement Petition. This issue will be addressed *infra*, as part of our discussion of the unresolved issues.

### 6. Recovery of Automated Meter Reading (AMR) Investment

To the extent that PECO deploys smart meters sooner than required to replace failures of its existing AMR meters and meter communication modules, it will incur accelerated depreciation on these existing meters and modules. The total amount of accelerated depreciation will depend on the actual timeline for universal deployment of the new smart meters. PECO St. No. 4 at 8.

The Settlement Petition provides, *inter alia*, that PECO’s recovery of its AMR investment as of January 1, 2011, and any subsequent additional transition investment shall be recovered in equal installments in the Smart Meter surcharge over a period ending December 31, 2020. Settlement Petition at 8-9.

We concur with the ALJ that this is a reasonable way for PECO to recover its investment. I.D. at 23.

### 7. Cost Recovery

PECO initially proposed to recover the charge resulting from the Smart Meter Cost Recovery Surcharge (SMCRS) in the customer charge component of each customer’s bill. Consequently, the charges recovered from each customer class would not vary based on individual customers’ usage. PECO averred that its proposal is consistent with the way metering costs are treated for ratemaking purposes. PECO St. No. 5 at 15.

The OCA recommended that the SMCRS charges allocated to the residential class should be either: (1) allocated on a per kWh basis, or (2) allocated such that the meter costs be allocated on a customer-charge basis and all indirect costs be allocated on a per kWh basis. In support of its per kWh allocation, the OCA argued that residential customers with greater usage stand to realize greater benefits from the smart meter capabilities. OCA St. No. 2 at 13.

The Settlement Petition provides that SMCRS charges allocated to the residential class be recovered on a per kWh basis and the costs for all commercial and industrial customers be recovered through a customer charge. Settlement Petition at 8.

The OSBA supports the cost allocation and cost recovery methodologies presented in the Settlement Petition. However, the OSBA’s support of the recovery of all SMCRS charges to small commercial and industrial customers on a customer-charge basis is dependent on the allocation of common costs. If the Commission were to adopt the OCA’s recommendation to allocate common costs among the rate classes on a per kWh basis, then the OSBA recommends that only the direct meter costs be allocated to small commercial and industrial customers through a customer charge and common costs be allocated on a per kWh basis. OSBA R.Exc. at 15-18.

We believe that the modifications to the cost recovery methodology contained in the Settlement Petition are reasonable and should be adopted. Since the OSBA’s position on the allocation of costs to small commercial and industrial customers is dependent on the resolution of the allocation of common costs among the three rate classes, this issue will be addressed *infra*, as part of our discussion of the unresolved issues.

### 8. SMCRS Filing Schedule, Reconciliation and Adjustment

In its direct testimony, the OTS proposed, *inter alia*, a uniform filing and reconciliation schedule for all EDCs implementing smart meter surcharges and that quarterly filings and adjustments be made in addition to the annual process proposed by PECO. OTS St. No. 1 at 6-9.

Consistent with the OTS recommendation, the Settlement Petition provides that PECO will make a filing each August 1 to reconcile the costs to be recovered through the Smart Meter Surcharge for the 12-month period ending June 30. Any over/under recovery will be included in the SMCRS effective January 1 of the following year. Interest on both over and under recoveries will be at the rate of six percent. The Settlement Petition also provides for quarterly filings effective January 1, April 1, July 1, and October 1. A quarterly adjustment will be implemented if a quarterly filing indicates the surcharge would increase or decrease by more than five percent. Settlement Petition at 8.

We support the adoption of the OTS’s recommendation for a uniform procedural schedule of all EDCs implementing a SMCRCS and the imposition of interest at 6% for over and under collections. While we may not have required PECO to submit quarterly filings, we will not disturb this component of the Settlement because PECO will be tracking the revenue and costs associated with the Surcharge anyway and it will enable the parties to assess the need for potential interim adjustments to the SMCRCS.

### 9. American Recovery and Reinvestment Act (ARRA) Compliance and Taxation

As discussed, *supra,* PECO filed an application for assistance with the U.S. Department of Energy (DOE) under its Smart Grid Investment Grant Program for $200 million in matching federal funds. By letter dated October 27, 2009, the DOE notified PECO that its application had been selected for award negotiations.

Under the Settlement Petition, PECO may seek recovery of the reasonable costs of securing the ARRA funding and the compliance and reporting costs related to the federal grant as part of its SMCRS filing. Settlement Petition at 9.

In its Plan Petition, PECO considered any funds it received from an ARRA grant as taxable income. PECO St. No. 5 at 13, PECO Exh. ABC-2 at 1f. In response to interrogatories from the OCA, PECO stated that there is no direct guidance from which to conclude that the ARRA grants are taxable income. OCA St. No. 2 at 8.

In light of this uncertainty over whether ARRA funds received by PECO will be considered as taxable income, the Settlement Petition provides for the scenario that the ARRA grant funds are determined to be not taxable. Unless a determination is made prior to the implementation of the SMCRS, the surcharge will calculated on the basis that the federal funds are taxable. However, if the federal funds are subsequently determined not to be subject to taxes, the corresponding reduction in smart metering costs will be reflected as an over-recovery through the SMCRS reconciliation mechanism. Settlement Petition at 9.

We concur with the proposed treatment of tax expenses associated with the ARRA grant funds. If these funds are determined not to be subject to taxes, tax expenses collected though the SMCRS will be directly credited thorough the SMCRS [[3]](#footnote-3).

## B. Issues Not Addressed in the Settlement Petition

### 1. Allocation of Common Costs

As discussed, *supra*, all of the Parties agreed that the costs to procure and install the smart meters or the “direct meter costs” can be identified by customer class and should be allocated accordingly. However, the costs incurred to manage the meter data and to integrate the new meter system with PECO’s existing billing system or “common costs” cannot be directly assigned to specific customer classes. These common costs include: (1) the meter data management system,(2) information technology investments, (3) the communications network and (4) support and management of the Plan. PECO MB at 3.

The Commission addressed the allocation of smart meter costs among the customer classes in the *Implementation Order*.

The Commission will require that all measures associated with an EDC’s smart metering plan shall be financed by the customer class that receives the benefit of such measures. In order to ensure that proper allocation takes place, it will be necessary for the utilities to determine the total costs related to their smart metering plans, as discussed in E.1. Once these costs have been determined, we will require the EDC to allocate those costs to the classes whom derive benefit from such costs. Any costs that can be clearly shown to benefit solely one specific class should be assigned wholly to that class. Those costs that provide benefit across multiple classes should be allocated among the appropriate classes using reasonable cost of service practices.

*Implementation Order* at 32.

PECO proposed to allocate the common costs based on the number of customers in each rate class. PECO averred that the size of the network needed to read the meters and the size of the system used to store meter data are a function of the number of meter locations that have to be connected. PECO St. No. 5-R at 7.

The OCA pointed out that the common costs are estimated to be about $198 million and will account for more than half of the total program costs during the first three years of PECO’s Plan. OCA MB at 9-10. The OCA submitted that PECO’s Large C&I customer class is responsible for 33% of the retail revenues and 44% of the total energy usage yet under PECO’s proposed allocation would incur only 0.2% of the common costs. In contrast, the OCA stated that the Residential Class is responsible for 44% of retail revenues and 34% of the energy usage yet will incur 90% of the total common costs. *Id*. at 13. The OCA stated that under PECO’s proposed allocation, residential customers would bear nearly 90% of the common costs “even though it is far from clear that residential customers would receive anything close to 90% of the benefits of those costs.” *Id*. at 8. The OCA averred that PECO’s allocation of common costs assumes that a small residential customer using 500 kWh per month will receive the same benefit as a large industrial customer with a 50 MW load and an 80% load factor. OCA St. No. 3 at 5.

The OCA argued that the *Implementation Order* indicates that smart meter plan costs “are appropriately allocated” to those customers that derive the benefit of those costs. The OCA also submitted that the Preamble of Act 129 states that one of the main goals of the Act is to reduce the cost and price instability of electric energy. The OCA averred that allocating these costs based on energy and demand recognizes the purpose of Act 129 and that larger customers will derive far greater benefits from both smart meter systems and the enhanced technological capabilities. OCA MB at 8-9. The OCA proposed that common costs be allocated among the customer classes based on the arithmetic average of each class’s percentage of metered energy consumption and percentage of PECO’s annual single coincident peak. OCA St. No. 3 at 8.

In response to the OCA’s proposed allocation of common costs, PECO argued that the *Implementation Order* does not provide a benefits-based allocation of` costs not capable of direct assignment. PECO acknowledged that in the *Implementation Order,* the Commission issued a “general directive” that “all measures associated with an EDC’s smart metering program shall be financed by the customer class that receives the benefit of such measures.” PECO averred that following that “general guideline,” the Commission gave “specific instructions” that costs that can be identified with a particular class be allocated to that class and costs that cannot be assigned to a particular class be allocated among the classes using reasonable cost of service principles. PECO MB at 9. In addition, PECO argued that there is no evidence to support the OCA’s assumption that the usage reductions enabled by smart metering technology will provide benefits to each class proportionate to its demand or energy. *Id*. at 12.

In addition to arguments similar to those presented by PECO, PAIEUG submitted that the OCA’s proposed cost allocation ignores the fact that Large C&I customers will not realize “most of the actual, direct, and quantifiable benefits expressly delineated” in Act 129. PAIEUG averred that the majority of Large C&I customers are already intensively managing their energy needs, pursuing energy efficiency and demand response opportunities, and have already made a substantial investment in smart meter technology. PAIEUG MB at 18. PAIEUG also argued that, in addition to being an inappropriate allocation of costs, the OCA’s proposal would “simply constitute a disproportionate and discriminatory shift in responsibility” of costs from the residential class to PECO’s C&I customers. PAIEUG MB at 21.

The OSBA also supported the allocation of common costs proposed by PECO and opposed the OCA’s proposal. However, in the event that the Commission was to be persuaded by the OCA’s arguments, the OSBA proposed an alternative cost-based allocation of common costs. The alternative is to allocate the common costs using the same allocation proposed for direct metering costs. The OSBA stated that this alternative would provide some relief to the residential rate class by reducing its share of the common costs from 89.9% to 83%. OSBA MB at 17.

The ALJ recommended that PECO’s plan should not be modified as proposed by the OCA. The ALJ stated that assigning the costs to the various customer classes based on the benefits received is not how metering costs have been allocated by the Commission and should not be adopted here. The ALJ concluded that ‘[c]learly, metering costs – whether those associated with the current meters or the smart meters that will eventually be deployed – vary with the number of customers.” I.D. at 27.

In response to the OCA’s interpretation of the language in the *Implementation Order*, the ALJ states:

The Commission statement relied on by the OCA (that costs should be allocated to the customers who derive the benefit from those costs) is merely a general cost of service statement that recognizes that customers should not bear the costs of facilities not used to serve them, and is modified by the immediately following specific directives concerning direct costs (directly and wholly assigned to the affected class) and common costs (allocated using reasonable cost of services practices).

I.D. at 28.

The ALJ also concurred with the position presented by PECO, PAIEUG and OSBA that even if the benefits for each class could be accurately measured, there is no support for the assumption that each customer class would derive the benefits from smart meter technology in direct proportion to the class’s demand and energy usage. The ALJ stated that this would shift a large portion of the residential class costs to the other rate classes resulting in a subsidization of the residential class. Citing *Lloyd v. Pa. Pub. Util. Comm’n*, 904 A.2d. 1010, 1020 (Pa. Cmwlth. 2006) (*Lloyd*), the ALJ found that this would produce unjust and unreasonable rates since the rates would not be based on a cost-of-service study. I.D. at 29.

The ALJ acknowledged the alternate allocation methodology proposed by the OSBA and concluded that it was unnecessary to address OSBA’s proposal in light of her recommendation to adopt PECO’s allocation methodology. *Id.*

The OCA excepts to the ALJ’s finding that the OCA’s proposed allocation of common costs is inconsistent with traditional cost allocation principles. The OCA argues the underlying tenet of cost of service studies is to allocate costs among the classes in proportion to which the classes have caused those costs to be incurred. The OCA points to its direct testimony which averred that what causes the costs of smart metering to be incurred are the benefits that are expected to be derived from the deployment of such a system. OCA Exc. at 5-6.

The OCA also requests that the ALJ’s and PAIEUG’s position that the Commonwealth Court’s decision in *Lloyd* supports PECO’s proposed allocation of common costs be rejected. The OCA submits that the *Lloyd* decision upholds the allocation of the Sustainable Energy Fund (SEF) costs to all classes of customers on the basis that all ratepayers benefit from SEF’s activities. The OCA argues, that in the face of an argument by industrial customers that SEF provides no demonstrable benefits to ratepayers, the Court stated “[w]hat the core of that argument ignores is that the General Assembly has specifically authorized that public service programs such as SEF be funded.” *Lloyd* at 1025. The OCA submits that the Court noted that the purpose of the SEF is “to promote the development and use of renewable energy and clean energy technologies, energy conservation and efficiency which promote clean energy.” *Lloyd* at 1024. The OCA concludes that similar to the SEF, the smart metering program established by Act 129 “seeks to further the availability of adequate, reliable, affordable, efficient, and environmentally sustainable electric service at the least cost, taking into account the benefits of price stability over time and the impact on the environment.” OCA Exc. at 9.

We concur with the ALJ’s explanation of the *Implementation Order*. It is our intention that the costs of the meter data management system, the information technology investments, the communications network and the support and management activities of the Plan, and other common costs be allocated to the customer classes based upon the extent to which these investments and services enable customers to participate in the smart meter program. Since the size of the network needed to read the meters and the size of the system used to store meter data is most closely reflected by the number of meter locations that have to be connected, we find that common costs should be allocated based on the number of meters connected to the system.

Even if we were to adopt the OCA’s position that common costs were to be allocated based on the conservation and load management benefits realized by the customers in each rate class, an allocation based on customer energy consumption and demand would not reflect those incremental benefits. As discussed, *supra*, there is a considerable variation in the extent to which customers in the three rate classes have already undertaken conservation and demand management endeavors. `

### 2. Recovery of Costs from the Small C&I Class

As discussed, *supra*, the Settlement Petition provides that all metering costs will be recovered from both small and large C&I customers through a customer charge and from residential customers on a per kWh basis. The OSBA requests that the Commission direct that common costs be allocated to the small C&I customers on a per kWh basis, if the Commission were to adopt the OCA’s proposed allocation of common costs. Otherwise, the OSBA supports the allocation proposed in the Settlement Petition. OSBA Exc. at 15-19. Since we are adopting the allocation of common costs as set forth in the Plan, we do not need to address a recovery methodology different from the methodology proposed in the Settlement petition.

### 3. Sub-hourly Metering

The *Implementation Order* requires parties to address the ability to provide hourly *or more frequent* energy usage data. *Implementation Order* at 16. While energy markets only require information on hourly usage, these requirements may not be responsive to the regional transmission organization requirements of *ancillary* services.

As discussed, *supra*, the Settlement Petition establishes a definitive stakeholder process and specific issues to be addressed as part of the process. By this Opinion and Order, we direct PECO and request that the other Parties address the need, ability, and cost for sub-hourly metering. Specifically, the Parties should address the following issues for residential, small C&I and large C&I customers:

1. What are the capabilities and limitations of proposed smart meters to measure and record sub-hourly usage?
2. What are the capabilities and limitations of proposed smart meter communication and data storage systems to transmit and store sub-hourly usage information?
3. What are the sub-hourly PJM requirements for participation in ancillary service markets?
4. What are the Company’s incremental smart meter, communication, data storage, and data sharing costs associated with these sub-hourly requirements for ancillary services?
5. What are the incremental equipment and installation costs of pulse data recorders used to measure sub-hourly meter data?
6. Is a pulse data recorder attached to the Company’s meter sufficiently accurate for use by PJM in its ancillary markets, or is redundant metering required to meet PJM standards?
7. What are the additional customer costs associated with (1) transferring pulse meter information from the meter to inside the customer’s premise, (2) processing this data into a usable format, (3) communicating the data to a third party or PJM?
8. To the extent a customer requests sub-hourly data, what, if any, cost recovery charge is appropriate. For example, would it be appropriate to have a customer charge that varies with the level of sub-hourly metering requested, and, if so, what would those sub-hourly metering charges be?

As a supplement to the collaborative process with the Parties, PECO shall provide a thorough cost/benefit analysis for review by the Parties. The results of the collaborative process on sub-hourly metering shall be submitted with the initial dynamic pricing and customer acceptance program expected to be filed with the Commission in June 2010.

### 4. Electric Data Interchange Historic Interval Usage (EDI HIU) Protocols

Embedded in PECO’s Plan was a commitment to provide consumption data and other customer information to third parties via established EDI protocols and data transfer methods described in the *Implementation Order*. PECO St. No. 2 at 14. Pursuant to our *Implementation Order*, the EDCs were strongly encouraged to implement a new historical interval usage transaction in order to provide customers and their designated agents with 12 months of interval usage data. *Implementation Order* at 25. Under the Settlement Petition, PECO committed to provide direct access to licensed electric generation suppliers or other third parties authorized by the Commission, *by means of EDI transactions*, of the data currently available from its existing AMR system and any additional Advanced Read Services it is able to provide. I.D. at 16.

While we commend PECO for its commitment to use EDI protocols to provide consumption and other information to third parties, neither the record nor the Settlement Petition addresses how or when the Company plans to implement these transactions. Other utilities throughout the Commonwealth have or will be soon implementing HIU transaction capabilities, and we believe it would be prudent to seek comments from PECO and other interested parties on whether PECO should adopt these protocols, and if so, how and when they should be implemented.

Therefore, by this Opinion and Order, we shall solicit comments on the appropriateness of requiring PECO to implement the EDI HIU protocols. We direct PECO to file Comments, and other interested parties are encouraged to comment on the adequacy and timeliness of PECO’s current interval usage data processes, so as to assist the Commission in its decision. We believe that, if the Commission is to require PECO to make these changes, it should be done in an expedient manner. Therefore, Comments should be filed with the Commission on or before May 17, 2010, so that the Commission can address these issues at its May 20, 2010 Public Meeting. In order to meet these time constraints, the Commission will not accept Replies to the Comments.

# VI. Conclusion

For the reasons set forth hereinabove, we conclude that the Settlement Petition is in the public interest and should be adopted as modified, consistent with this Opinion and Order. We direct PECO to file Comments, and other interested parties are invited to file Comments, on the adequacy and timeliness of PECO’s current interval usage processes and the appropriateness of requiring PECO to implement EDI HIU protocols. We find that the revised Plan, as amended by the Settlement Petition and this Opinion and Order, is in the public interest and satisfies the requirements of 66 Pa. C.S. § 2807(f)(1)–(f)(3) and the *Implementation Order*. Unless the Parties to this proceeding notify the Commission that they do not support the Settlement Petition as amended by this Opinion and Order by May 17, 2010, PECO is permitted to implement its Plan, as amended by the Settlement Petition and this Opinion and Order. PECO shall submit its SMCRS to the Commission for approval. Copies of this filing shall be served on all Parties to this proceeding. The Exceptions filed by the OCA are denied. Accordingly, we will adopt the Initial Decision of ALJ Chestnut as modified by this Opinion and Order. **THEREFORE;**

**IT IS ORDERED:**

1. That the Petition of PECO Energy Company for Approval of its revised Smart Meter Technology Procurement and Installation Plan, and the Joint Petition for Partial Settlement at Docket No. M-2009-2123944 filed by PECO Energy Company; the Office of Consumer Advocate; the Office of Small Business Advocate; the Department of Environmental Protection; the Clean Air Council; Constellation NewEnergy, Inc. and Constellation Energy Commodities Group, Inc.; and the Association of Community Organizations for Reform Now, are granted, each subject to the following conditions:

a. That the revised Smart Meter Technology Procurement and Installation Plan, as revised by the Partial Settlement, shall be modified as set forth in this Opinion and Order.

b. That none of the Parties to the Joint Petition for Partial Settlement shall file with the Commission, on or before May 17, 2010, written notice that said Party is withdrawing from the Partial Settlement.

c. That the Commission reserves the right to issue a subsequent Order that may incorporate additional modifications in the revised Smart Meter Technology Procurement and Installation Plan, as revised by the Joint Petition for Partial Settlement and this Opinion and Order, based upon the Comments received regarding the adequacy and timeliness of PECO’s current interval usage processes and the appropriateness of requiring PECO to implement electric data interchange historical interval usage protocols.

2. That PECO shall file Comments, and other interested Parties are invited to file Comments, on the adequacy and timeliness of PECO’s current interval usage processes and the appropriateness of requiring PECO to implement electric data interchange historical interval usage protocols. All Comments shall be filed with the Commission Secretary and the Director of the Commission’s Office of Special Assistants on or before May 17, 2010. Replies to Comments will not be accepted.

3. That PECO is permitted to implement the revised Smart Meter Technology Procurement and Installation Plan, as amended by the Joint Petition for Partial Settlement and this Opinion and Order, subject to the conditions set forth in Ordering Paragraph No. 1.

4. That on or after May 18, 2010, and subject to the conditions set forth in Ordering Paragraph No. 1, PECO Energy Company is permitted to file tariffs and tariff supplements to implement a Smart Meter Cost Recovery Surcharge that sets forth the specific charge per kWh to be included in the base rates of the residential rate class and the specific monthly charges per customer to be included in the customer charge of non-residential rate classes. PECO Energy Company shall also file supporting documentation reflecting the calculation of these charges. Copies of this filing shall be served on all Parties to this proceeding. PECO Energy Company shall not begin collecting rates pursuant to its tariff until it is approved by this Commission.

5. That, subject to the conditions set forth in Ordering Paragraph No. 1, PECO Energy Company is permitted to file its proposed Tariff Rule 14.10 containing Provisions for Customer-Requested Smart Meters as submitted in Attachment B to the Joint Petition for Partial Settlement.

6. That the tariffs and tariff supplements addressed in Ordering Paragraphs Nos. 4 and 5 may become effective on less than statutory notice pursuant to 52 Pa. Code §§ 53.31 and 53.101.

7. That the Initial Decision of Administrative Law Judge Marlane R. Chestnut, issued on March 1, 2010, is adopted as amended by this Opinion and Order.

8. That the Exceptions filed by the Office of Consumer Advocate are denied.

9. That in the event that the parties to a base rate proceeding for PECO Energy Company reach a proposed settlement, the parties shall establish a rate of return on equity for the purpose of implementing the Smart Meter Cost Recovery Surcharge.

10. That, as part of the collaborative process set forth in the Joint Petition for Partial Settlement, PECO Energy Company shall and the Parties are requested to address the need, ability, and cost for sub-hourly metering.

11. That any directive, requirement, disposition or the like contained in the body of this Opinion and Order, which is not the subject of an individual Ordering Paragraph, shall have the full force and effect as if fully contained in this part.

** BY THE COMMISSION,**

 Rosemary Chiavetta

 Secretary

(SEAL)

ORDER ADOPTED: April 22, 2010

ORDER ENTERED: **May 6, 2010**

1. For the purpose of this proceeding, the members of PAIEUG, listed on Attachment A to its Petition to Intervene, are Air Liquide Industrial U.S., LP; The Boeing Company; Buckeye Partners, L.P.; Drexel University; Franklin Mills Associates Limited Partnership; GlaxoSmithKline; Jefferson Health System; Kimberly-Clark Corporation; Merck & Co., Inc.; Saint Joseph’s University; Sanofi-Aventis; Temple University; and Villanova University. [↑](#footnote-ref-1)
2. On March 31, 2010, PECO filed a general base rate filing with the Commission at Docket No. R-2010-2161575. [↑](#footnote-ref-2)
3. We note that subsequent to the filing of the Settlement Petition, the Internal Revenue Service issued Revenue Procedure 2101-20 that provides a safe harbor that treats Smart Grid Investment Grants as nontaxable contributions to capital. This Revenue Procedure is effective March 10, 2010.

 [↑](#footnote-ref-3)